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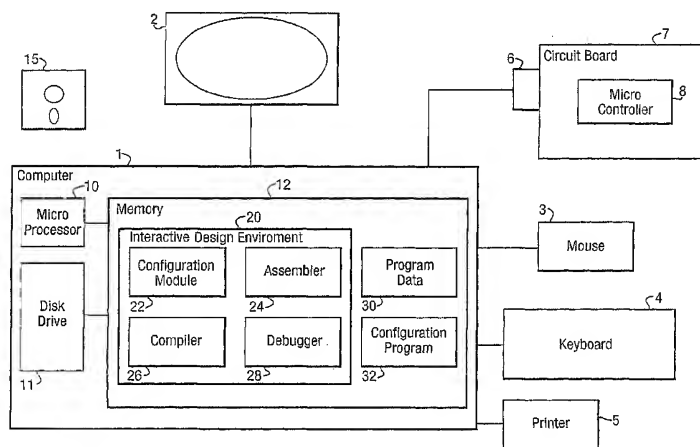
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(54) Title: METHOD AND APPARATUS FOR GENERATING CONFIGURATION DATA



(57) Abstract: A computer system (1) is described for programming and testing microcontrollers (8). The computer System (1) includes an interactive design environment (20) comprising a configuration module (22), an assembler (24), a compiler (26) and a debugger (28). The compiler (26), assembler (24) and debugger (28) all enable high level program data (30) to be converted into binary code and stored within a program store to control the functioning of a CPU included within a micro-controller (8). The configuration module (22) is such to enable a user to generate a configuration program (30) for storing values in registers for controlling the settings of inbuilt peripherals in the micro-controller (8) and the routing of signals to and from the peripherals. The register values for routing signals are identified in a two stage process. Firstly utilising the configuration module (22) a user identifies which peripherals are to be enabled. A user interface is then generated to illustrate possible configurations for routing the signals necessary for the identified set of peripherals. A user can then select which of the identified sets of configuration data should be used to generate a configuration program (20).